



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE OFFICE
300 Pinson Drive
Corpus Christi, TX 78406-1803

PRESS RELEASE

To: Assignment Editors, News Directors and TV Weather Broadcasters
What: Top 5 Significant South Texas Weather Related Events for 2011
From: National Weather Service Forecast Office Corpus Christi
Contacts: 361-289-0959

The Top 5 Significant South Texas Weather Related Events for 2011

South Texas can experience a wide range of weather phenomena over the course of a year, and the weather can change quickly and dramatically, leading to floods, drought, wildfires, hurricanes, tornadoes, severe thunderstorms and even winter storms. Here are the 5 most significant weather-related events which impacted South Texas in 2011.

<u>Event / Location</u>	<u>Date</u>	<u>Fatalities/Injuries/Losses</u>
1) Drought & Wildfires	January through December	None/None/\$135 million
2) Ice Storm & Hard Freeze	February 1 st – 5 th	None/Four/\$1.5 Million
3) January Squall Line - Coastal Bend	January 9 th	None/None/\$5 Million
4) EF-2 Tornado - Robstown/Calallen	January 9 th	None/None/\$5 Million
5) T.S. Don	July 29 th -30 th	None/None/None

We empathize with those who were injured or experienced property damage in South Texas from weather related events in 2011. We would like to pass along a few safety tips:

- 1) Have a means to receive forecasts, watches and warnings 24 hours a day from your favorite local radio or TV Station, cable TV provider, internet provider, cell phone Company, or NOAA Weather Radio.
- 2) Know the name of your county and those counties around you, so that when warnings are issued you know where you are in relation to the storms.
- 3) Take appropriate action when a watch or warning is issued. For more information go to www.weather.gov/corpuschristi

For more information for your radio, TV, newspaper, or web link, go to www.weather.gov/corpuschristi. Under “Additional Info”, click on “Major Events”. Additional information on these events also follows in this release:



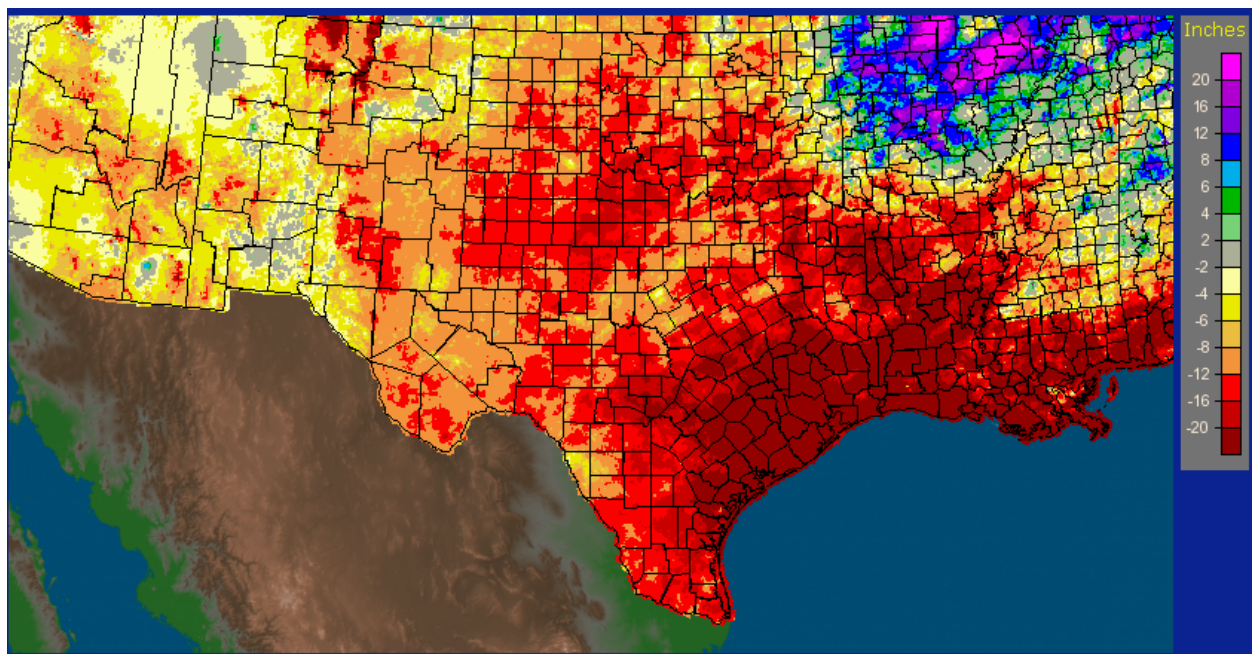
1: Worst Drought in Texas History

It's no surprise that we choose the ongoing drought as the most significant weather related event in South Texas during 2011. Accumulated rainfall deficits during the last year have been massive, with deficits ranging from 15 to 30 inches below normal. Percentage-wise, most locations in South Texas have received anywhere from 15 to 40 percent of their normal rainfall since October 2010. For example, during the last water year (October 1st 2010 through September 30th 2011), Corpus Christi received only 10.22 inches of rainfall, resulting in a deficit of 21.38 inches (32.3 percent of normal). Victoria received 11.89 inches of precipitation during the 12 month period (a deficit of 28.51 inches/29.4 percent of normal), while Laredo received a mere 3.45 inches of rain (a deficit of 17.39 inches/16.6 percent of normal). For the 2011 calendar year, Corpus Christi will end with just over 12 inches of rain, the second driest calendar year in 124 years of record keeping. Victoria will end with just over 13 inches of rain, the second driest calendar year in 114 years of record keeping. Laredo will end with just under 7 inches of rain, the all-time driest calendar year in 103 years of record keeping. These are both staggering and sobering statistics, and the current drought ranks as the worst one year drought in Texas history.

This lack of rainfall has been devastating to the farmers and cattle ranchers, with below normal crop yields and cattle-men selling their livestock due to lack of forage. In South Texas alone, losses with the 2011 drought have been estimated at \$135 million.

In addition to the drought, daytime temperatures have often been well above normal. This combination of lack of rainfall and above normal temperatures has raised the wildfire danger over the region to very dangerous levels at times. Low afternoon humidity and occasionally windy conditions have helped to spread sporadic wildfires over Texas during the drought. In South and Deep South Texas over 356 thousand acres have been burned in 2011, destroying nearly 200 structures. Also, the increased temperatures and below normal rainfall has resulted in greater water usage and larger evaporation rates. This has diminished reservoir levels significantly from reservoir levels observed a year ago.

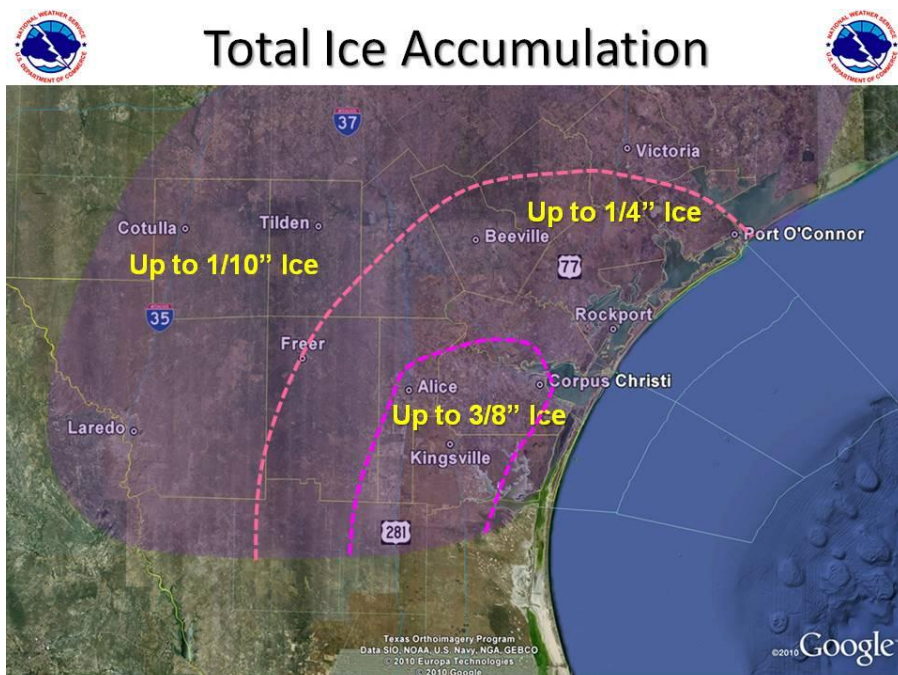
The historic and devastating Texas drought of 2011 appears to have little chance of improving over the next several months as La Nina conditions continue over the Eastern Pacific Ocean. From a climate standpoint, La Nina generally means that South Texas will likely have below normal rainfall and above normal temperatures during the winter.



Above: 2011 Departure from Normal Precipitation

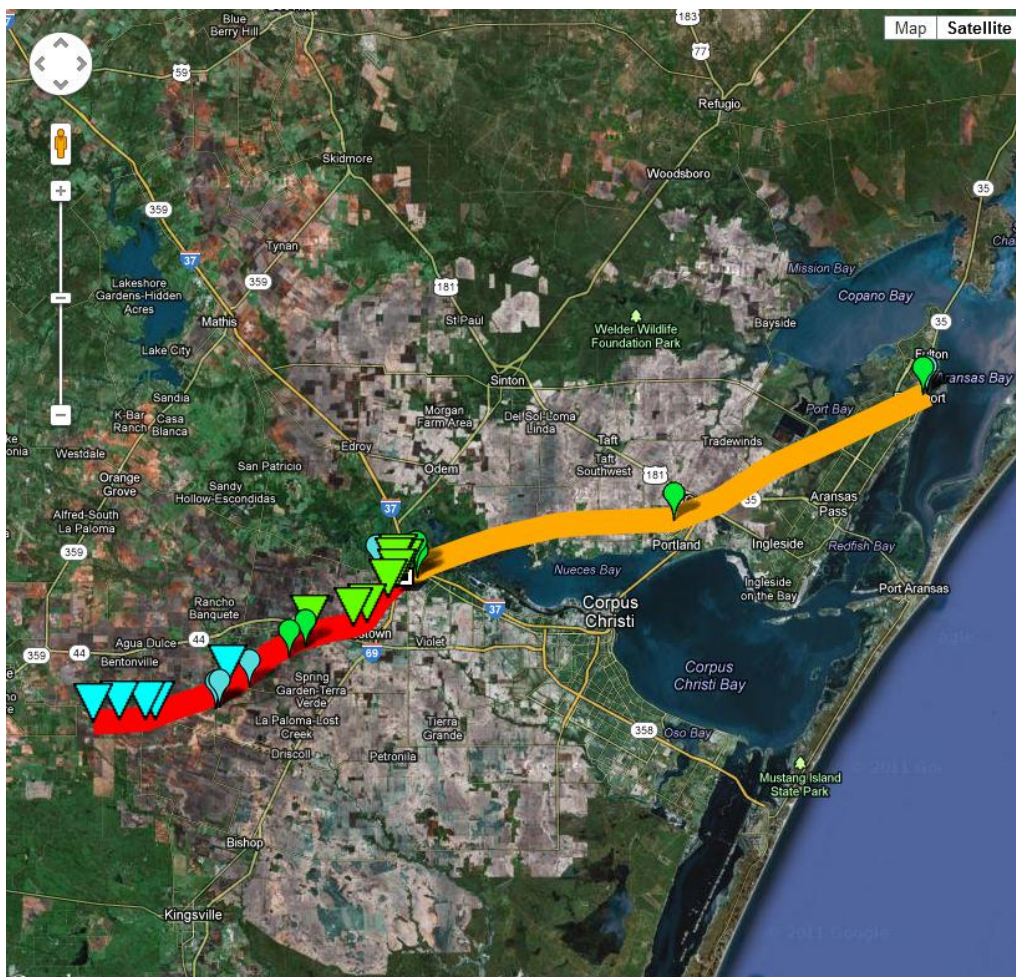
2: Ice Storm Temporarily Cripples South Texas

South Texas experienced frigid temperatures and a prolonged hard freeze between Tuesday morning February 1st and Saturday morning February 5th, 2011. A large dome of arctic air plunged southward across South Texas on Tuesday morning February 1st behind a strong cold front. Arctic high pressure continued to push further south across South Texas between Wednesday February 2nd and Friday February 4th. As a result, widespread record low temperatures occurred between February 2nd and 5th. Most areas averaged between the middle 20s to middle 30s during this entire period. The duration of freezing temperatures for this event was quite remarkable. These very cold temperatures set the stage for one of the more significant ice storms to affect South Texas in recent history. A strong upper level disturbance approached South Texas on Thursday February 3rd. This disturbance along with increasing Gulf moisture above the cold arctic air helped to produce freezing drizzle by early Thursday evening. Freezing drizzle and light freezing rain then continued through all of Thursday night before ending Friday morning. A brief mix of sleet and snow did occur at times during this event across the Brush Country and northern Coastal Bend. However, little to no sleet or snow accumulation was observed during this event. Ice accumulations on the other hand were significant across much of South Texas. Generally 1/4" to 3/8" of ice accumulations occurred across the Coastal Bend and eastern Brush Country with up to 1/10" ice accumulation across the remainder of South Texas. This amount of ice produced very dangerous driving conditions. As a result, state and local officials closed many of the main roads, highways and bridges across South Texas. Numerous accidents along with multiple injuries were reported. The Corpus Christi Fire and Police Departments responded to 90 accidents in the first three hours of the ice storm.



3 & 4: Damaging Squall Line & Rare January Tornado

A storm system moved through the South Texas during the early morning hours on January 9th. The storms developed into a severe line of thunderstorms that moved through the Coastal Bend. A tornadic thunderstorm developed along the line of storms, and persisted for over 20 miles travelling from just southeast of Alice to near Calallen. Damaging straight line winds affected most of the Coastal Bend and extended well into the Gulf of Mexico east of Rockport. Widespread wind damage was observed across the Coastal Bend as the storms moved quickly through the region. Approximately 30,000 customers lost power as a result of the storms. This also marked the first time a tornado has been recorded in South Texas in the month of January, dating back to 1950. A NWS storm survey concluded straight-line winds between 70 and 90 mph occurred from Callalen to Rockport. Wind speeds of up to 100 mph (EF-2 on the Enhanced Fujita Scale) were estimated in Robstown with the tornado. A path length of damage of nearly 65 miles was observed from the starting point of the tornado in Jim Wells County to the end of the straight-line wind damage in Rockport. It is estimated nearly \$10 million in damage occurred along this path. Further north, doppler radar indicated another severe line of storms across Victoria and Calhoun Counties, where 70 mph winds were estimated.



Above: Tornado path and damage in Red and Straight-line wind damage in orange



5: Tropical Storm Don – “A Dud”

Don originated from a tropical wave that moved off the west coast of Africa in mid-July. The wave tracked across the Atlantic and into the Caribbean Sea. Don became a Tropical Depression early on July 26th, just northeast of Cancun, and 12 hours later strengthened to a Tropical Storm. After reaching tropical storm status, Don moved generally toward the west-northwest. While Don moved across the Gulf of Mexico, it encountered an environment characterized by light to moderate northerly vertical shear and a relatively dry airmass, which likely prevented significant intensification. Don reached its peak intensity of 45 kts July 28th while centered about 345 n mi east-southeast of Corpus Christi, Texas. After that time the storm began to weaken as deep convection rapidly decreased near the center, likely due to increasing northerly to northeasterly vertical wind shear and entrainment of dry air from drought-stricken areas in northeastern Mexico and southern Texas. As the deep convection diminished, the winds associated with Don decreased and the cyclone weakened to a tropical depression as it made landfall during the evening of July 29th along the Padre Island National Seashore just to the northeast of Baffin Bay. After landfall, Don continued moving west-northwestward and weakened to a remnant low when centered near Alice, Texas. The remnant low dissipated shortly thereafter. Don produced no damage across South Texas and little to no rainfall across the drought-stricken region.

Tropical Storm Don may seem like a strange choice for a significant weather event across South Texas, given that it produced little to no rainfall across the region after looking so promising. But it is because of what it didn't produce – rainfall – that helped prolong the drought across the region. For this reason we consider Don significant.



Above: Tropical Storm Don approaching Texas, before dissipating.

